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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,224	01/04/2002	Ryuji Uesugi	SHG-0201	3453

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EXAMINER

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/035,224

Applicant(s)

UESUGI ET AL.

Examiner

Patrick D. Niland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) 7-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 5and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. The amendment of 8/26/05 has been entered. Claims 1-2, 5, and 7-15 are pending with claims 7-14 having been withdrawn from consideration as being directed to a non-elected invention.

2. Claims 1, 2, 5, and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

A. The newly added recitation of “veratrole” was not present in the originally filed specification. There is not adequate evidence that the change from peratrole to veratrole was simply a typo. The v and p are in very different locations on the qwerty keyboard. There is no evidence that the applicant possessed the invention using “veratrole” at the time of the instant invention.

3. The amendment filed 8/26/05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

A. The newly added recitation of “veratrole” was not present in the originally filed specification. There is not adequate evidence that the change from peratrole to veratrole was simply a typo. The v and p are in very different locations on the qwerty keyboard. There is no evidence that the applicant possessed the invention using “veratrole” at the time of the instant invention.

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Applicant is required to cancel the new matter in the reply to this Office Action.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 5, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 722179 A2 Wang et al. in view of US Pat. No. 5965645 Beck et al. and US Pat. No. 4550982 Hirai.

Wang discloses the instantly claimed compositions at page 2, lines 55-57; page 3, lines 1-12; page 6, lines 45-58, of which the ether plasticizers fall within the scope of the instantly claimed high boiling solvents and the plasticizer of the instant claim 2, page 7, lines 1-25; page 9, lines 5-55, of which the amounts encompass those of the instant claims when considered with the broader amounts recited in the prior disclosure of Wang; and the remainder of the document.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed combinations of ingredients and amounts thereof in the composition of Wang because they are encompassed by Wang and would have been expected to give the properties disclosed by Wang. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use diphenyl ether of column 6, lines 22-32 of Beck et al. and column 9, lines 1-5 of Hirai, these plasticizers are shown to plasticize polymers encompassed by Wang et al., and page 6, lines 46-51 of Wang encompasses this known plasticizer. No unexpected results are seen stemming from the differences between the Wang reference and the instant claims in a manner commensurate in scope with the Wang disclosure

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and the instant claims. The applicant argues that the art does not suggest the instantly claimed features. While the art does not specifically mention the instantly claimed boiling points and the instantly claimed required difference between the boiling points of the two solvents, compositions having these properties are encompassed by the patentee. As shown by the applicant, many of the solvents of the reference have the instantly claimed lower boiling points. The plasticizers of the reference are necessarily solvents for the binder by definition of “plasticizer”. Furthermore, plasticizers are relatively non-volatile, i.e. of high boiling point. Many of the disclosed plasticizers would appear to have the instantly claimed higher boiling points based on the applicant’s examples of such compounds. The amount of picking and choosing of the components and amounts thereof of the reference required to achieve the instantly claimed invention is small. Thus, a prima facie case of obviousness exists for the reasons stated above.

The applicant’s arguments regarding motivation are not persuasive. Wang teaches the use of “plasticizers” generically in their green tapes. Plasticizers by definition lower the Tg of the polymer, e.g. soften it. See page 6 of Wang, lines 45-51. The list recited by Wang is denoted by “include”, showing that the list is not exhaustive. Thus there is no teaching away from using the secondary reference plasticizers in Wang’s composition nor suggestion that the secondary reference plasticizers will make Wang’s composition unsuitable for its intended use as plasticization is specifically desired. The applicant has not shown that the above discussed plasticizers of the secondary reference would be expected to make the green tape of Wang too soft in a manner commensurate in scope with the instant claims and the cited prior art. It is particularly noted that Wang discusses controlling the amount of plasticizer in the composition

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by adjusting its amount (page 7, lines 5-15 of Wang). The skilled artisan knows clearly that the amount of plasticization is proportional to the amount of plasticizer and can adjust that amount to the desired degrees of plasticization. Applicant's arguments regarding the allegation of a lack of suggestion or motivation to combine the above references ignores the desire of Wang to plasticize their compositions and Wang's use of ether plasticizers to do so. The oxygen in these compounds is expected to enhance their burning out of the fired product is why the examiner suspects that so many of the examples of Wang's plasticizers are ethers. The applicant's arguments regarding Wang's ether solvents is not persuasive in that it ignores the "Plasticizer" section of Wang, page 6, lines 45-58 which includes peg methyl ether, and ppg. However, it is the generic plasticizer teaching that is relied on for basis to combine the teachings of Beck and Hirai. Ethyl cellulose of new claim 15 is disclosed at page 5, line 43 of Wang. The applicant's arguments do not overcome this obviousness rejection for the reasons stated above and it is therefore maintained.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

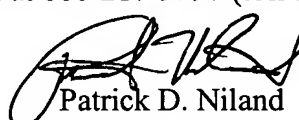
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D. Niland  
Primary Examiner  
Art Unit 1714